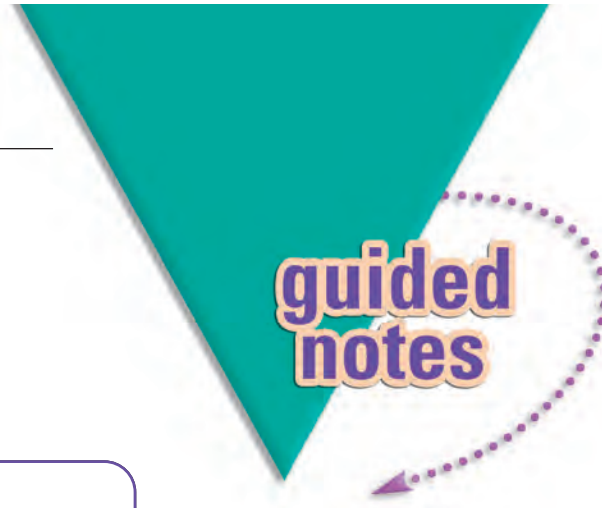


NAME _____

Module 5 Solving Linear Inequalities of
One Variable

Lesson 2 Solving One-Step Linear Inequalities



guided
notes

Lesson Objectives

- Solve one-step linear inequalities using addition and subtraction.
- Solve one-step linear inequalities using multiplication and division.

Addition Property of Inequality

For all real numbers a , b , and c , if $a > b$, then $a + c > b + c$. The property also holds for \leq , $<$, and \geq .

1 Solve and graph.

$$-4 < Q - 5 \quad Q > 1$$



2 Solve and graph.

$$N + 1 \geq -2 \quad N \geq -3$$



Multiplication and Division Property of Inequality (Part I)

For all real numbers a , b , and c , if a is positive and $b < c$, then

$ab < ac$ and $\frac{b}{a} < \frac{c}{a}$. The property also holds for \leq , $>$, and \geq .

3 Solve and graph.

$$5c > 15 \quad c > 3$$



Multiplication and Division Property of Inequality (Part II)

For all real numbers a , b , and c , if a is negative and $b < c$, then

$ab > ac$ _____ and $\frac{b}{a} > \frac{c}{a}$. The property also holds for \leq , $>$, and \geq .

4 Solve and graph.

$$\frac{x}{-3} \geq -2 \quad x \leq 6$$

